

WORKSHOP SCIENTIFIC REPORT

Action number: **CA16212; INDEPTH**

Workshop title: **Hi-C workshop**

Workshop start and end date: **October 9 and 10, 2018**

Organizers: **Stefan GROB & Bjoen GRUENING**

Location: **Institute of Plant and Microbial Biology, University of Zurich, Zurich, Switzerland**

PURPOSE OF THE WORKSHOP:

As a part of work group 4 of the INDEPTH COST, we have organized a workshop for Hi-C data analysis.

Our aim was to get people together that have a strong interest in chromosome interactions and epigenetic modifications.

We also would like to enable a knowledge-transfer between the students and teach them in state of the art data analysis. Therefore, selection of the participants was performed according to the answers to the following questions:

- When do you plan to do your experiment?
- Do you have previous knowledge in Hi-C?
- Please describe briefly your bioinformatics skills:
- What is the main question of the project?

DESCRIPTION OF WORK CARRIED OUT DURING THE WORKSHOP

The 2 days workshop have been conducted into two stages.

- The first one was focused on a general introduction to Hi-C and 4C methods. Students were informed about experimental setups, pitfalls and general recommendations from experts in this field.
- The second part was a hands-on data analysis using Galaxy (<https://usegalaxy.eu>) with a particular focus on tools and workflows.

All the training material was made available to the community at <https://galaxyproject.github.io/training-material/topics/epigenetics/>

DESCRIPTION OF THE MAIN OUTPUTS OF THE WORKSHOP

There were a total of 7 attendees, most of which planned to or already performed Hi-C experiments. The attendees expected to learn more about how to analyse Hi-C data sets, with a special focus on bioinformatic tools which are accessible to non-bioinformaticians.